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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,912	09/22/2003	Ioannis Kouramanis	00100.03.0010	9917

29153 7590 04/23/2007  
ADVANCED MICRO DEVICES, INC.  
C/O VEDDER PRICE KAUFMAN & KAMMHOLZ, P.C.  
222 N.LASALLE STREET  
CHICAGO, IL 60601

EXAMINER
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NGUYEN, PHU K

ART UNIT	PAPER NUMBER
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2628

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/23/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/667,912

Applicant(s)

KOURAMANIS ET AL.

Examiner

Phu K. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.


**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
PHU K. NGUYEN  
PRIMARY EXAMINER  
GROUP 2300

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 2/7/05.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over MIZUNO (7,184,604).

As per claim 1, Mizuno teaches the claimed "apparatus for image processing, the apparatus comprising: "a first memory device that receives a video input signal containing an encoded video frame comprising a plurality of portions of encoded video frame data, the first memory device having a storage capacity less than all of the plurality of portions of encoded video frame data for the encoded video frame" (Mizuno, the block readout of input data; column 19, lines 41-58), "the first memory device receiving a first portion of the encoded video frame data" (Mizuno, memory 204a; figure 37); "a graphics processor coupled to the first memory device such that the graphics processor receives the first portion of the encoded video frame data and generates a first graphics portion" (Mizuno, wavelet transform block 202); and "a second memory device receiving the first graphics portion" (Mizuno, memory 204b). It is noted that Mizuno does not teach "a handheld device" which utilizes the block processing algorithm as claimed. However, given Mizuno's process for decoding and displaying an encoded image block-by-block, it would have been obvious that "a handheld device" utilizes such decoding method for displaying on a screen because the block-by-block

process reduces the required memory during the decoding which provides an advantage for small device such as "handheld device" as claimed.

Claim 2 adds into claim 1 "an external memory device coupled to the second memory device such that the first graphics portion may be stored therein" which would have been obvious in view of Mizuro's using an external memory to store of the output image in figure 37 (official notice).

Claim 3 adds into claim 2 "the first memory device receives all of the portions of the encoded video frame data and provides each of the portions of the encoded video frame data to the graphics processor on a portion-by-portion basis" (Mizuro, column 23, lines 30-50).

Claim 4 adds into claim 3 "the graphics processor generates a plurality of graphics portions and provides the plurality of graphics portions to the second memory device on a portion-by-portion basis" (Mizuro, block-by-block basis; figure 37).

Claim 5 adds into claim 4 "the second memory device provides the plurality of graphics portions to the external memory on a portion-by-portion basis" which would have been obvious in view of Mizuro's using an external memory to store of the output image in figure 37 (official notice).

Claim 6 adds into claim 5 "at least one display operably coupled to the external memory such that an output display may be provided from the external memory, wherein the output display includes the plurality of graphics portions" (Mizuro, the example of displayed object in figure 45).

Claim 7 adds into claim 6 "the graphics processor further includes a quantization table for generating the graphics portions having an adjusted data set and wherein the output display is a thumbnail of the plurality of graphics portions" which would have been obvious compression or down-quantization the image into a thumbnail for representing the image (official notice).

Claim 8 adds into claim 1 "a real time direct memory access device coupled to the first memory device and the second memory device and the graphics processor such that the real time direct memory access device provides for direct access to the first memory device and the second memory device" (Mizuro, the memories 204a-204b; figure 37).

Claim 9 adds into claim 8 "the first memory device is a first portion of an embedded memory device and the second memory device is a second portion of the

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embedded memory device" which would have been obvious because Mizuro's memories can be a portion within an embedded memory device (official notice).

Claims 10-13, and 15-17 claim a method based on the system of claims 1-6, 8-9; therefore, they are rejected under the same reason.

Claim 14 adds into claim 11 several encoding process which Mizuro teaches in the wavelet encoding (figure 16).

Claim 18 adds into claim 10 "a ring buffer approach" which would have been obvious in view of Mizuro's memories 204a-204b (official notice).

Claims 19-30 are similar to claims 1-6, 8-13, 15-18 but adds JPEG format (Mizuro, column 1, lines 10-13); and the input device such as camera which would have been obvious (official notice); image decoder (Mizuro, figure 37); quantization (obvious for a camera- official notice); or MPEG format (official notice).

Claims 31-38 claim a emthod based on the system of claims 19-30; therefore, they are rejected under the same reason.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu K. Nguyen whose telephone number is (571) 272 7645. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (571) 272 7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Phu K. Nguyen  
April 11, 2007

  
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